Ch2 Borrowing Money (Quick Look)

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10:45 AM

Similar to investing

	Investing	Borrowing
Simple	$A = P + Prt$	$A = P + Prt$
Compound	$A = P\left(1 + \frac{i}{n}\right)^{tn}$	$A = P\left(1 + \frac{i}{n}\right)^{tn}$

Investing:
- A: future value
- P: how much you invest
- i: comp. freq. for interest you earn

Borrowing:
- A: total you'll pay back depending on how long you have the money (principal + interest)
- P: how much you borrow
- i: comp. freq. for interest you pay

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$P = \$1200$
$i = 0.112$
$n = 12$
$t = 0.5$ yrs

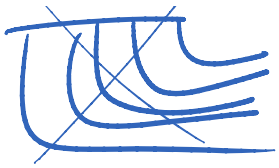
a) $A = 1200\left(1 + \frac{0.112}{12}\right)^{0.5(12)}$
$= \$1268.79$

b) interest earned $= A - P = \$68.79$

But: Just like with investing, if you make regular loan payments you should use a financial calculator

a financial calculator

mycalculators.com



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$P = 179900 \times 0.90 = \$161910$

$i = 4.5\%$

$n = 2$ (compounding semi annually)

weekly payments

$t = 15$ years $\longrightarrow 15 \times 12$ months $= 780$ months